SEQUENCE LISTING

<110> Salceda, Susana
Cafferkey, Robert
Recipon, Herve
Sun, Yongming

<120> A NOVEL METHOD OF DIAGNOSING, MONITORING, STAGING, IMAGING AND TREATING BREAST CANCER

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<150> 60/166,973
<151> 1999-11-23

<160> 21

<170> PatentIn Ver. 2.0

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Arg Gly His Glu Val Thr Val Leu Ala Ser Ser Ala Ser Ile Leu Phe
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Asp Pro Asn Asp Ala Ser Thr Leu Lys Phe Glu Val Tyr Pro Thr Ser
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Trp Ser Asp Ile Arg Lys Asp Ser Phe Trp Leu Tyr Phe Ser Gln Glu
100 105 110

Gln Glu Ile Leu Trp Glu Leu Tyr Asp Ile Phe Arg Asn Phe Cys Lys
115 120 125

Asp Val Val Ser Asn Lys Lys Val Met Lys Lys Leu Gln Glu Ser Arg
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Phe Asp Ile Val Phe Ala Asp Ala Val Phe Pro Cys Gly Glu Leu Leu
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Ala Ala Leu Leu Asn Ile Arg Phe Val Tyr Ser Leu Arg Phe Thr Pro
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Gly Tyr Thr Ile Glu Arg His Ser Gly Gly Leu Ile Phe Pro Pro Ser
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Tyr Ile Pro Ile Val Met Ser Lys Leu Ser Asp Gln Met Thr Phe Met
195 200 205

Glu Arg Val Lys Asn Met Ile Tyr Val Leu Tyr Phe Asp Phe Trp Phe
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Gln Met Ser Asp Met Lys Lys Trp Asp Gln Phe Tyr Ser Glu Val Leu
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Leu Met Arg Asn Ser Trp Ser Phe Gln Phe Pro His Pro Phe Leu Pro
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Asn Val Asp Phe Val Gly Gly Phe His Cys Lys Pro Ala Lys Pro Leu
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Arg Ala Phe Ile Thr His Gly Gly Ala Asn Gly Ile Tyr Glu Ala Ile
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Tyr His Gly Ile Pro Met Val Gly Ile Pro Leu Phe Phe Asp Gln Pro
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Asp Asn Ile Ala His Met Lys Ala Lys Gly Ala Ala Val Arg Leu Asp
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Glu Phe Val Met Pro His Lys Gly Ala Lys His Leu Arg Val Ala Ala
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<400> 21

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Lys Asn Lys Glu Phe Ser Ala Asp Gln Met Ser Glu Asn Thr Asp Gln
         35                  40                  45

Ser Asp Ala Ala Glu Leu Asn His Lys Glu Glu His Ser Leu His Val
     50                  55                  60

Gln Asp Pro Ser Ser Ser Ser Lys Lys Asp Leu Lys Ser Ala Val Leu
 65                  70                  75                  80

Ser Glu Lys Ala Gly Phe Asn Tyr Glu Ser Pro Ser Lys Gly Gly Asn
                 85                  90                  95

Phe Pro Ser Phe Pro His Asp Glu Val Thr Asp Arg Asn Met Leu Ala
            100                 105                 110

Phe Ser Phe Pro Ala Ala Gly Gly Val Cys Glu Pro Leu Lys Ser Pro
        115                 120                 125

Gln Arg Ala Glu Ala Asp Asp Pro Gln Asp Met Ala Cys Thr Pro Ser
    130                 135                 140

Gly Asp Ser Leu Glu Thr Lys Glu Asp Gln Lys Met Ser Pro Lys Ala
145                 150                 155                 160

Thr Glu Glu Thr Gly Gln Ala Gln Ser Gly Gln Ala Asn Cys Gln Gly
                165                 170                 175

Leu Ser Pro Val Ser Val Ala Ser Lys Asn Pro Gln Val Pro Ser Asp
            180                 185                 190

Gly Gly Val Arg Leu Asn Lys Ser Lys Thr Asp Leu Leu Val Asn Asp
        195                 200                 205

Asn Pro Asp Pro Ala Pro Leu Ser Pro Glu Leu Gln Asp Phe Lys Cys
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Asn Ile Cys Gly Tyr Gly Tyr Tyr Gly Asn Asp Pro Thr Asp Leu Ile
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Lys His Phe Arg Lys Tyr His Leu Gly Leu His Asn Arg Thr Arg Gln
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Asp Ala Glu Leu Asp Ser Lys Ile Leu Ala Leu His Asn Met Val Gln
            260                 265                 270

Phe Ser His Ser Lys Asp Phe Gln Lys Val Asn Arg Ser Val Phe Ser
        275                 280                 285

Gly Val Leu Gln Asp Ile Asn Ser Ser Arg Pro Val Leu Leu Asn Gly
    290                 295                 300

Thr Tyr Asp Val Gln Val Thr Ser Gly Gly Thr Phe Ile Gly Ile Gly
305                 310                 315                 320

Arg Lys Thr Pro Asp Cys Gln Gly Asn Thr Lys Tyr Phe Arg Cys Lys
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Phe Cys Asn Phe Thr Tyr Met Gly Asn Ser Ser Thr Glu Leu Glu Gln
            340                 345                 350

His Phe Leu Gln Thr His Pro Asn Lys Ile Lys Ala Ser Leu Pro Ser
        355                 360                 365

Ser Glu Val Ala Lys Pro Ser Glu Lys Asn Ser Asn Lys Ser Ile Pro
    370                 375                 380

Ala Leu Gln Ser Ser Asp Ser Gly Asp Leu Gly Lys Trp Gln Asp Lys
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Ile Thr Val Lys Ala Gly Asp Asp Thr Pro Val Gly Tyr Ser Val Pro
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Ile Lys Pro Leu Asp Ser Ser Arg Gln Asn Gly Thr Glu Ala Thr Ser
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Tyr Tyr Trp Cys Lys Phe Cys Ser Phe Ser Cys Glu Ser Ser Ser Ser
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Leu Lys Leu Leu Glu His Tyr Gly Lys Gln His Gly Ala Val Gln Ser
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Gly Gly Leu Asn Pro Glu Leu Asn Asp Lys Leu Ser Arg Gly Ser Val
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Lys Thr Asp Lys Ser Ser Ser Gly Ala Lys Lys Lys Asp Phe Ser Ser
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Lys Gly Ala Glu Asp Asn Met Val Thr Ser Tyr Asn Cys Gln Phe Cys
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Asp Phe Arg Tyr Ser Lys Ser His Gly Pro Asp Val Ile Val Val Gly
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Pro Leu Leu Arg His Tyr Gln Gln Leu His Asn Ile His Lys Cys Thr
545                 550                 555                 560

Ile Lys His Cys Pro Phe Cys Pro Arg Gly Leu Cys Ser Pro Glu Lys
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His Leu Gly Glu Ile Thr Tyr Pro Phe Ala Cys Arg Lys Ser Asn Cys
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Ser His Cys Ala Leu Leu Leu Leu His Leu Ser Pro Gly Ala Ala Gly
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Ser Ser Arg Val Lys His Gln Cys His Gln Cys Ser Phe Thr Thr Pro
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Asp Val Asp Val Leu Leu Phe His Tyr Glu Ser Val His Glu Ser Gln
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Ala Ser Asp Val Lys Gln Glu Ala Asn His Leu Gln Gly Ser Asp Gly
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Gln Gln Ser Val Lys Glu Ser Lys Glu His Ser Cys Thr Lys Cys Asp
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Phe Ile Thr Gln Val Glu Glu Glu Ile Ser Arg His Tyr Arg Arg Ala
        675                 680                 685

His Ser Cys Tyr Lys Cys Arg Gln Cys Ser Phe Thr Ala Ala Asp Thr
    690                 695                 700

Gln Ser Leu Leu Glu His Phe Asn Thr Val His Cys Gln Glu Gln Asp
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Ile Thr Thr Ala Asn Gly Glu Glu Asp Gly His Ala Ile Ser Thr Ile
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Asp Ser Lys Met Gly Glu Pro Val Ser Glu Ser Val Val Lys Arg Glu
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Lys Leu Glu Glu Lys Asp Gly Leu Lys Glu Lys Val Trp Thr Glu Ser
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Ser Ser Asp Asp Leu Arg Asn Val Thr Trp Arg Gly Ala Asp Ile Leu
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Arg Gly Ser Pro Ser Tyr Thr Gln Ala Ser Leu Gly Leu Leu Thr Pro
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Val Ser Gly Thr Gln Glu Gln Thr Lys Thr Leu Arg Asp Ser Pro Asn
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Val Glu Ala Ala His Leu Ala Arg Pro Ile Tyr Gly Leu Ala Val Glu
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Thr Lys Gly Phe Leu Gln Gly Ala Pro Ala Gly Gly Glu Lys Ser Gly
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Ala Leu Pro Gln Gln Tyr Pro Ala Ser Gly Glu Asn Lys Ser Lys Asp
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Glu Ser Gln Ser Leu Leu Arg Arg Arg Arg Gly Ser Gly Val Phe Cys
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Ala Asn Cys Leu Thr Thr Lys Thr Ser Leu Trp Arg Lys Asn Ala Asn
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Gly Gly Tyr Val Cys Asn Ala Cys Gly Leu Tyr Gln Lys Leu His Ser
915 920 925

Thr Pro Arg Pro Leu Asn Ile Ile Lys Gln Asn Asn Gly Glu Gln Ile
930 935 940

Ile Arg Arg Arg Thr Arg Lys Arg Leu Asn Pro Glu Ala Leu Gln Ala
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Glu Gln Leu Asn Lys Gln Gln Arg Gly Ser Asn Glu Glu Gln Val Asn
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Gly Ser Pro Leu Glu Arg Arg Ser Glu Asp His Leu Thr Glu Ser His


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Ser Leu Thr Lys Ser His Ser Ala Gln Gln Pro Val Leu Val Ser Gln
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Thr Leu Asp Ile His Lys Arg Met Gln Pro Leu His Ile Gln Ile Lys
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Ser Pro Gln Glu Ser Thr Gly Asp Pro Gly Asn Ser Ser Ser Val Ser
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Glu Gly Lys Gly Ser Ser Glu Arg Gly Ser Pro Ile Glu Lys Tyr Met
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Arg Pro Ala Lys His Pro Asn Tyr Ser Pro Pro Gly Ser Pro Ile Glu
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Lys Tyr Gln Tyr Pro Leu Phe Gly Leu Pro Phe Val His Asn Asp Phe
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Gln Ser Glu Ala Asp Trp Leu Arg Phe Trp Ser Lys Tyr Lys Leu Ser
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Val Pro Gly Asn Pro His Tyr Leu Ser His Val Pro Gly Leu Pro Asn
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Pro Cys Gln Asn Tyr Val Pro Tyr Pro Thr Phe Asn Leu Pro Pro His
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Phe Ser Ala Val Gly Ser Asp Asn Asp Ile Pro Leu Asp Leu Ala Ile
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Lys His Ser Arg Pro Gly Pro Thr Ala Asn Gly Ala Ser Lys Glu Lys
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Thr Lys Ala Pro Pro Asn Val Lys Asn Glu Gly Pro Leu Asn Val Val
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Lys Thr Glu Lys Val Asp Arg Ser Thr Gln Asp Glu Leu Ser Thr Lys
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Cys Val His Cys Gly Ile Val Phe Leu Asp Glu Val Met Tyr Ala Leu
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His Met Ser Cys His Gly Asp Ser Gly Pro Phe Gln Cys Ser Ile Cys
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Gln His Leu Cys Thr Asp Lys Tyr Asp Phe Thr Thr His Ile Gln Arg
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